If you are using a printed copy of this procedure, and not the on-screen version, then you <u>MUST</u> make sure the dates at the bottom of the printed copy and the on-screen version match.

The on-screen version of the Collider-Accelerator Department Procedure is the Official Version.

Hard copies of all signed, official, C-A Operating Procedures are kept on file in the C-A ESHQ

Training Office, Bldg. 911A.

#### C-A OPERATIONS PROCEDURES MANUAL

12.17	Shut Down	<b>Before</b>	Power	Outage
14.1/	Shut Down	DCIOIC	I OWCI	Outage

Text Pages 2 through 4

## **Hand Processed Changes**

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M. Wiplich

#### 12.17 Shut Down Before Power Outage

## 1. Purpose

The purpose of this procedure is to protect electrical and electronic equipment from sudden and unsupervised startup after the power is restored. This is necessary for the vacuum system and a good idea for computers. Pumps should not come on unsupervised after a shutdown since the degree of vacuum spoilage will be unknown.

#### 2. Responsibilities

It is the responsibility of the person or persons executing this procedure to observe all safety rules.

## 3. <u>Prerequisites</u>

3.1 Tandem Operator training

## 4. <u>Precautions</u>

None

#### 5. **Procedure**

Checklist	(when indicated by "", initial step upon completion)
5.1	Power off all cryo compressors and heads, valve closed.
5.2	Back fill ion source with ultra pure argon.
5.3	Power off all ion pumps, valve open.
5.4	Close machine gate valves.
5.5	Close all vacuum valves in TtB sections 10 thru 13.
5.6	Turn off all 303 controllers in TtB sections 10 thru 13.
5.7	Ignore all TtB faraday cups and harps.
5.8	Valve off air to TtB.

5.9	Sensaphone off.
5.10	Turn off Plectron to save batteries.
5.11	Abort halon.
5.12	All other equiptment off.
5.13	Chilled water pump off.
5.14	Deionized water pumps off.
5.15	SF6 Gas Panel - HCV valves closed, lock valves key switch.
5.16	D1 power supply - disconnect IEEE cable and turn off.
5.17	TR-4 computers (PCs and HP) and all equiptment off.
5.18	Close beam line valves TR-2 & TR-4.
5.19	303 controller in TR-4 off.
5.20	Turn off racks TR-4.
5.21	Both Miran systems off.
5.22	Computers and monitors off. See list.
5.23	TR-1 computer off.
5.24	TR-2 computer off.
5.25	Control room computers off (4).
5.26	Apollo computer and video off.
5.27	Lab 1 Vladimir's computer off.

5.28	The following items are only done if it is known that TtB power will go off.		
	5.28.1	Close all vacuum valves in TtB.	
	5.28.2	Turn off all 303 controllers in TtB.	
	5.28.3	Ignore all TtB faraday cups and harps.	
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The "_record.	` ′	he procedure are for place-keeping only. This procedure is not a	

# 7. References

6.

None

## 8. Attachments

None